

## The Global Race for **Nanotechnology Leadership:**

## North Carolina Can Rise to the Challenge

North Carolina's future economic success will depend on how well we respond to the challenges of an evolving technology economy, and one that increasingly works at the nanoscale. In response to the challenges and opportunities presented by nanotechnology, the Department of Commerce, the State Science and Technology Advisor, and the North Carolina Board of Science and Technology formed the Governor's Task Force on Nanotechnology and North Carolina's Economy in the spring of 2005.

Composed of 28 members from key sectors across the state, the Task Force's charge was to:

Develop a roadmap for an aggressive and coordinated initiative to advance successful nanotechnology-based economic development and high-wage employment across North Carolina.

The Task Force responded with an outline for a two-pronged approach to developing the nanotechnology economy in North Carolina by focusing on:

- Strengthening North Carolina's core economic development approach to advancing technology-based economic development, and
- 2. Strengthening the building blocks within that core approach that focus specifically on nanotechnology,

with the goal of outlining a process to create the widest variety of positive outcomes better-educated workers, more jobs, higher wage levels, more competitive businesses, and higher standards of living.

This agenda is nothing short of building a roadmap for a critical transformation in our economy, the success of which will depends heavily on having the appropriate conditions in place—funding, facilities, equipment, personnel, policies, cultures, and goals—at each link in the economic chain. Public understanding and public leadership must also play key roles in this effort.

To facilitate its efforts, the Nanotechnology Task Force formed three working groups:

- Commercialization
- **Education and Workforce Development**

Research and Development

Drawing upon a variety of statistical indicators, policy reports, surveys of nanotechnology companies, and best practices in other states, each working group conducted detailed "state of the State" assessments of North Carolina's technology economy, which yielded findings and strategic imperatives for future action. These are outlined on the

following pages, and are organized according to the technology-based economic development flowchart shown

on the next page. Together, they provide a roadmap for strengthening the technology-based economy and nanotechnology in North Carolina.

**Public sector institutions** have the ability to articulate a pubic agenda and then act as a catalyst. Government's role as a convenor of different interests helps to build bridges across disciplines and between upstream and downstream activities.

**New Foundations for** Growth: The U.S. Innovation System Today and Tomorrow, **RAND Corporation,** January 2002